

*INS. A2* ~~WIRELESS SECURITY ACCESS MANAGEMENT~~  
~~FOR A PORTABLE DATA STORAGE CARTRIDGE~~

ABSTRACT

*INS. A3* A portable security system mounted in a portable data  
5 storage cartridge for managing access by users to the cartridge.  
A programmable computer processor mounted in the cartridge is  
powered by and receives data from and transmits data to a data  
storage drive via a wireless RF interface, when mounted in the  
drive. A user table has a unique user identifier for each  
10 authorized user and lists permitted activities the user is  
authorized to conduct with respect to the data storage cartridge.  
Preferably, a private key, public key algorithm is employed.  
Thus, the user identifier comprises a user symbol and a user  
decrypting sender public key. A user authentication message from  
15 the authorized user is encrypted by a sender private key and a  
receiver public key, in accordance with a predetermined  
algorithm, employing the cryptographic algorithm. The  
cryptographic algorithm decrypts the user authentication message  
employing a receiver private key and the sender public key,  
20 whereby the user authentication message is known to have come  
from the user. Then, the security system algorithm grants access  
to the user for the listed activities with respect to the  
cartridge.